UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,764	09/29/2006	Hitoshi Hata	297119US0PCT	6726

22850 7590 07/09/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
OLADAPO, TAIWO	
ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
07/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/594,764	HATA ET AL.	
	Examiner	Art Unit	
	TAIWO OLADAPO	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment dated 03/18/2009 has been considered and entered for the record. New rejections necessitated by amendments are made below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 – 6, 8 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipton (US 6,372,696) in view of Watts et al. (US 6,337,309)

6. In regards to claims 1, 2, 4, 5, Tipton teaches lubricating automotive traction fluids such as in automatic or continuously variable transmissions (CVT) (column 1 lines 4 - 17) comprising a base oil of polymers such as dimers, trimers, tetramers of norbornanes (column 3 lines 8 – 22). As the base oil of Tipton teaches base oils as taught by applicant having the cohesive energy density limitation, the base oil of Tipton is considered to possess the cohesive energy density value recited in claims 1, 2, (see applicants specification, page 9 lines 3 – 20).

Tipton teaches that the lubricant has kinematic viscosities at 40°C in a range that anticipates the limitations of claim 1 (see column 19 & 20 table). Tipton also teaches the lubricant contains phosphorus compounds, including esters (column 11 lines 35-42). Tipton does not teach phosphoric esters containing thioether bond.

Watts teaches a CVT fluid similar to the invention of Tipton [0001]. Watts teaches that the fluid contains phosphorus esters of a structure I having hydrocarbyl groups R and R_1 which contains thioether bonds (column 5 lines 45 – 59). The hydrocarbyl groups contain from alkyl or aryl groups, wherein the alkyl group can be decyl which is a C_{10} group (column 6 lines 13 – 26). The compound meets the limitations of the phosphorus ester compound of claim 4, wherein Ai s hydrogen and R^7, R^8 are decyl groups having thioether bonds.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have used the thioether bond-containing phosphite ester of Watts as the phosphorus compound in the lubricating oil of Tipton, as Watts teaches that the phosphite is useful in CVT fluids.

7. In regards to claim 3, Tipton and Watts teach the lubricating oil containing groups such as dimers, trimers or tetramers of norbornanes as previously stated.

8. In regards to claim 6, 11, Tipton and Watts teach the lubricant having overbased calcium sulfonate (column 21 table). Tipton teaches that the overbased compounds have base values (mg KOH/g) of preferably 100 and up to preferably 400 (column 8 lines 28 – 41).

9. In regards to claim 8 – 10, 12, Tipton and Watts teach the lubricating oil composition for continuously variable transmission comprising the limitations of claim 1 as previously stated. The fluid is therefore suitable for the intended use as metallic belt, traction drive, or chain type CVT lubricant according to the instant invention.

The claims are product claims that are drawn to a composition of matter and therefore statements of intended use do not carry any patentable weight. Since the reference teaches the compositional limitations, it anticipates claims 8 – 10.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tipton (US 6,372,696) in view of Watts et al. (US 6,337,309) and further in view of Conary et al. (US 6,096,691)

14. In regards to claim 7, Tipton and Watts teach the lubricating oil composition for continuously variable transmissions. Tipton and Watts teach that the lubricating oil containing optional additives such as antiwear (column 21 line 25) but does not particularly recite a sulfur antiwear.

Conary teaches gear oil additives and lubricants containing them (Title) similar to the invention of Tipton and Watts combined. Conary teaches that the additives can be, i.e. sulfur antiwear (column 1 line 35; column 17 lines 10 – 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used sulfur antiwear additives in the composition according to Tipton and Watts combined, as Conary teaches it is a suitable antiwear additive for transmission or gear lubricating oils.

Response to Arguments

15. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

16. The action is properly made final because Tipton teaches components (A) and (C) which met the limitation of the previously rejected claim 1. The amendment has necessitated the new rejections made.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAIWO OLADAPO whose telephone number is (571)270-3723. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TO

/Glenn A Caldarola/
Acting SPE of Art Unit 1797